<u>IN THE DRAWINGS</u>

Applicants propose to label the blocks in Fig. 4 of the drawings in accordance with the accompanying ANNOTATED SHEET SHOWING CHANGES.

Enclosed herewith is a REPLACEMENT SHEET in which the above changes have been incorporated.

REMARKS

The Title has been changed, as suggested by the Examiner, such that it is more descriptive of the claimed invention.

The claims have been amended to more clearly define the invention as disclosed in the written description. In particular, the claims have been amended for clarity.

The Examiner has rejected claims 6 and 9 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 3 and 9, respectively, of co-pending U.S. Patent Application Serial No. 10/539,311, filed June 15, 2005.

Enclosed herewith is a Terminal Disclaimer referencing said U.S. application.

The Examiner has rejected claims 1-10 under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,301,205 to Tsutsui et al. in view of U.S. Patent 5,054,072 to McAulay et al.

The Tsutsui et al. patent discloses an apparatus and method for data compression using signal-weighted quantizing bit allocation, in which plural spectral coefficients are derived from a digital input signal, and spectrum-dependent quantizing bits are allocated to the spectral coefficients, the allocation being determined according to band magnitude, weighted depending on the band frequency.

The McAulay et al. patent discloses coding of acoustic waveforms, in which a final step in the coding process is quantizing the residual frequency.

As indicated in MPEP § 2143.03, "To establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka,* 490 F.2d 981, 180 USPQ 580 (CCPA 1974). "All words in a claim must be considered in judging the patentability of that claim against the prior art." *In re Wilson,* 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970).

The subject invention includes the limitations "performing an analysis on a first segment of said audio signal" and "selecting candidate sinusoids based on said analysis".

The Examiner has indicated that Tsutsui et al. teaches these claim limitations "(see Col 6, lines 1-20 where Tsutsui discusses allocating bits)" and "(see Figure 4 and Col. 7, lines 27-35 where Tsutsui discusses spectral coefficients)".

Applicants submit that the Examiner is mistaken. In particular, while Tsutsui et al. discloses "allocating bits", this is in relation to the level of quantizing in each of the bands in which the digital input signal is divided. Further, while Tsutsui et al. discusses the digital input signal has spectral coefficients which are then grouped into bands, there is no disclosure or suggestion in Tsutsui et al. that any of these bands is "candidate sinusoids", nor that any selection is based on the allocation of bits. Rather, the allocation of bits (for quantizing) in Tsutsui et al. takes place **after** the spectral coefficients are grouped into bands. Further, there is no disclosure or suggestion in Tsutsui et al. that the "spectral coefficients" are equivalent (or even similar) to the "sinusoids" of the subject invention.

The subject invention further includes the limitation "defining for at least one of the candidate sinusoids a local frequency band around a frequency of said at least one candidate sinusoid".

The Examiner has indicated that this limitation is taught by Tsutsui et al. at "Col. 7, lines 24-26, where Tsutsui discusses plural frequency bands based on spectral coefficients".

Again Applicants submit that the Examiner is mistaken. Tsutsui et al. merely takes the spectral coefficients of the input signal and divides them into frequency bands. However, there is no disclosure of selecting candidate sinusoids nor of establishing a local frequency band around the candidate sinusoid's frequency.

The subject invention includes the limitation "combining amplitudes of frequency components within said local frequency band from which at least one of the candidate sinusoids within said local frequency band is excluded".

The Examiner has indicated that this limitation is taught by Tsutsui et al. "see Col. 7, lines 12-24, where Tsutsui discusses each range of frequencies is grouped into a band, and the coefficients are quantized, therefore combined".

Applicants again submit that the Examiner is mistaken. In particular, Tsutsui et al. discloses in this section diving teh input signal in frequency forming plural frequency range signals, dividing each frequency range signal into time blocks, orthogonally transforming each block to form spectral coefficients, grouping the spectral coefficients in the frequency domain into bands, and

quantizing the spectral coefficients in each band. However, there is no disclosure or suggestion of "combining amplitudes of frequency components within said local frequency band from which at least one of the candidate sinusoids within said local frequency band is excluded".

The Examiner concedes that Tsutsui et al. does not disclose "excluding a candidate sinusoid", and indicates that this is disclosed in McAulay et al. at "col. 7, lines 45-50, where McAulay discusses replacing a measured frequency".

The portion of McAulay et al. noted by the Examiner states "The final step in coding the sine wave parameters is to quantize the frequencies. This is done by quantizing the residual frequency obtained by replacing the measured frequency by the central frequency of the harmonic bin in which the sine wave lies."

Applicants submit that it should be apparent that McAulay et al. does not disclose or suggest "excluding a candidate sinusoid" when "combining amplitudes of frequency components within said local frequency band".

In view of the above, Applicants believe that the subject invention, as claimed, is not rendered obvious by the prior art, either individually or collectively, and as such, is patentable thereover,

Applicants believe that this application, containing claims 1-10, is now in condition for allowance and such action is respectfully requested.

Respectfully submitted,

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